## SHAD TAKEN IN MACKEREL GILL-NETS.

## By CAPT. J. W. COLLINS.

[From a letter to Prof. S. F. Baird.]

A Friendship "mackerel dragger"—a 25-ton pinkey—while fishing with mackerel gill-nets in Ipswich Bay, about half-way from the Isle of Shoals to Halibut Point, on the night of June 9, took 27 full-grown shad, which would average 4½ pounds each, besides about a bushel of small shad. The latter have a black tip to their nose, and are called smutty-nosed shad by the fishermen. They are about the size of large alewives, so Captain Martin tells me, who saw both the large and small shad taken by this vessel.

About the 12th of June Capt. David Malonson, of schooner Crest of the Wave, caught about 8 barrels of large shad, but no small ones, in a purse-seine, 8 miles northeast from Cape Cod light.

The shad were apparently mixed with mackerel, since 20 barrels of the latter fish were taken in the seine at the same time. There have been other instances of the capture of shad by the mackerel fishermen this spring, the particulars of which we have not yet fully learned.

GLOUCESTER, MASS., June 22, 1882.

## TRANSPORTATION OF LIVE FISH.\*

[From the official report of the International Fishery Exposition, Berlin, 1880.]

The following report relates mainly to the means of transporting live rish, exhibited in Class IV, with the exception of those destined for the transportation of young fry. With regard to these, competent pisciculturists who have a larger experience will report. It is only the transportation of large fish, such as are brought to market, are exhibited in aquaria, and are used for stocking ponds, of which I intend to speak in this report.

The comparatively small number of articles exhibited to illustrate the transportation of live fish—whilst nearly all other departments of the exhibition were well represented—showed clearly how little the development of means for transporting fish has advanced of late years. It certainly has not kept pace with the rapid development of general means of transportation. The great importance of fish, more especially of saltwater fish, as a popular article of food urgently demands that suitable means of transporting fish should be furnished. This applies particularly to transportation by railroad. For transporting fish by water the

<sup>\* &</sup>quot;Transport lebender Fische," from Amtliche Berichte über die Internationale Fischerei-Ausstellung zu Berlin, 1880. Translated from the German by Herman Jacobson.